In the Claims:

1. (Currently Amended) A method of introducing a substance into an avian egg, comprising:

applying a sanitizing fluid to the shell of the egg to kill pathogens attached thereto;

forming an opening in the shell with a tubular punch, wherein the tubular punch has an internal bore, and wherein only a single elongated needle is positioned within the internal bore;

moving the ~~an~~ elongated needle through the tubular punch internal bore and then through the opening and into an interior portion of the egg, wherein the needle comprises a hollow tube having a free end, wherein the needle has a thickness that is smaller than 20 gauge, and wherein a cross-sectional area of the elongated needle is less than or equal to forty percent (40%) of a cross-sectional area of the internal bore of the tubular punch ;

releasing a substance into the egg via the needle;

retracting the needle from the egg; and

applying a sanitizing fluid to the needle to kill pathogens attached thereto.

2. (Original) The method of Claim 1, wherein the sanitizing fluid is applied to substantially the entire surface of the egg shell.

3. (Original) The method of Claim 1, wherein the free end is angled with respect to a longitudinal axis of the tube and has an opening surrounded by a planar, peripheral surface.

4. (Original) The method of Claim 4, wherein the free end is angled between about thirty degrees and about sixty degrees (30°-60°) with respect to the longitudinal axis of the tube.

5. (Original) The method of Claim 4, wherein the free end is angled by about forty-five degrees (45°) with respect to the longitudinal axis of the tube.

6. (Cancelled)

7. (Previously Presented) The method of Claim 1, wherein the sanitizing fluid is applied to internal and external portions of the tubular punch.

8. (Original) The method of Claim 1, wherein the needle has a thickness that is smaller than 20 gauge.

9. (Cancelled)

10. (Previously Presented) The method of Claim 7, wherein the tubular punch internal bore defines an internal volume, and wherein a volume displaced by the elongated needle is less than or equal to forty percent (40%) of the internal volume of the tubular punch.

11. (Original) The method of Claim 1, wherein the step of applying a sanitizing fluid to the shell of the egg is preceded by removing the egg from an incubator.

12. (Currently Amended) A method of introducing a substance into an avian egg, comprising:

removing an avian egg from an incubator, wherein the egg contains a live avian embryo;

applying a sanitizing fluid to substantially the entire surface of the shell of the egg to kill pathogens attached thereto;

forming an opening in the shell with a tubular punch, wherein the tubular punch has an internal bore, and wherein only a single elongated needle is positioned within the internal bore;

moving the ~~an~~ elongated needle through the tubular punch internal bore and then through the opening and into an interior portion of the egg, wherein the needle comprises a hollow tube having a free end that is angled with respect to a longitudinal axis of the tube, wherein the free end has an opening surrounded by a planar, peripheral surface, wherein the free end is angled between about thirty degrees and about sixty degrees (30°-60°) with respect to the longitudinal axis of the tube, wherein the needle has a thickness that is equal to or smaller than 20 gauge, and wherein a cross-sectional area of the elongated needle is less than or equal to forty percent (40%) of a cross-sectional area of the internal bore of the tubular punch;

releasing a substance into the egg via the needle;

retracting the injection device from the egg; and

applying a sanitizing fluid to the needle to kill pathogens attached thereto.

13. (Original) The method of Claim 12, wherein the free end is angled by forty-five degrees (45°) with respect to the longitudinal axis of the tube.

14. (Cancelled)

15. (Previously Presented) The method of Claim 12, wherein the sanitizing fluid is applied to internal and external portions of the tubular punch.

16. (Original) The method of Claim 12, wherein the needle has a thickness that is smaller than 20 gauge.

17. (Cancelled)

18. (Previously Presented) The method of Claim 14, wherein the tubular punch internal bore defines an internal volume, and wherein a volume displaced by the elongated needle is less than or equal to forty percent (40%) of the internal volume of the tubular punch.